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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,965	02/25/2004	Dan Aharoni	EMC-02-132CIP1	4123
24227 7590 03/13/2008				
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748				
EXAMINER				
PATEL, SHAMBHAVI K				
ART UNIT		PAPER NUMBER		
2128				
MAIL DATE		DELIVERY MODE		
03/13/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,965

Applicant(s)

AHARONI ET AL.

Examiner

SHAMBAVI PATEL

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A **request for continued examination** under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **12 February 2008** has been entered.

2. Claims 1-14 have been presented for examination. Claims 15-21 have been cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite** for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding **claim 7**, the term “feasibility” and the limitation as a whole are indefinite. What does “feasibility” mean in the context of the claim? How is it calculated? Regarding **claim 14**, the term “partially optimized” and the limitation as a whole are indefinite. What does “partially optimized” mean within the context of the claim? What parameters are optimized? How is the optimization performed?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. **Claims 1-14 are rejected under 35 U.S.C. 102(b)** as being clearly anticipated by **Friedrich (US Patent No. 5,276,877)**.

Regarding claims 1 and 8:

Friedrich discloses a method of enabling a user to construct on a target data storage system to replace a source data storage system through consolidation of one or more data storage components of the source data storage system (**abstract**), the method comprising the steps of:

- a. displaying a user interface to the user (**column 9 line 53-column 10 lines 19**), the user interface including a selector to enable the user to select a data storage component for inclusion in the target data storage system (**column 13 lines 28-35**)
- b. merging the data storage component into the target data storage system including obtaining configuration characteristics and workload characteristics for the data storage component (**column 14 lines 36-50**)
- c. simulating performance of the target data storage system using one or more workloads to obtain utilization and performance information for each data storage component and for the target data storage system (See **Fig. 3(a) and 3(b)**; **column 10 lines 8-20, 43-49**; **column 14 lines 66-column 15 line 2**; **column 32 line 43-column 33 line 14**)
- e. graphically representing the utilization or performance of each of data storage components in the target storage system on the user interface to enable the user to visually determine whether the target data storage system meets a desired performance (**column 15 lines 3-30**)

Friedrich discloses a computer (**column 2 lines 61-67**).

Regarding claims 2 and 9:

Friedrich discloses obtaining the workload characteristics from a workload analyzer that analyzes the workload characteristics of the associated data storage component when executing in the source storage system in response to the one or more workloads (**column 14 lines 46-65**).

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Regarding claims 3 and 10:

Friedrich discloses inputting the workload characteristics by a user (**column 10 lines 21-33**).

Regarding claims 4 and 11:

Friedrich discloses consolidating the source data storage system by constructing the target data storage system to include fewer data storage components than the source data storage system (**column 14 lines 21-34**).

Regarding claims 5 and 12:

Friedrich discloses data storage components in the target system that are of higher capacity than the source system (**column 26 line 53-column 27 line 21**).

Regarding claims 6 and 13:

Friedrich discloses load balancing the system in accordance with simulation results (**column 11 lines 25-36**).

Regarding claim 7:

Friedrich discloses indicating the feasibility of consolidating a plurality of data storage components of the source system to fewer or newer storage components (**column 29 lines 48-59 displays devices that may be removed**).

Regarding claim 14:

Friedrich discloses partially optimizing the system in accordance with the simulation results (**column 1 line 5-column 2 lines 49: analysis done to improve system**).

Conclusion

6. **Examiner's Remarks:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shambhavi Patel whose telephone number is (571) 272-5877. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKP

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128